



1ST SEM.: 2007/2008

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THE UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME : B.Sc. IN AGRONOMY YEAR IV

COURSE CODE: CP 404

TITLE OF PAPER: SOIL MANAGEMENT

TIME ALLOWED: TWO [2] HOURS

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS

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QUESTION 1

- a) Identify and write short notes on the two major types of ecosystems found in the tropics [10]
- b) Discuss how the effects of fire on the soil and the vegetation are influenced by the following parameters:
- i) The kind of fire [10]
 - ii) The frequency of fire [5]
- [25]

QUESTION 2

- a) "Pineapple plants destroy the soil", highlight the basis for this contention. [5]
- b) Discuss the causes of poor yields when crops are grown in soils previously under pineapple production. [20]
- [25]

QUESTION 3

- a) What are the major causes of soil salinity in agricultural lands [10]
- b) Discuss the management of saline soils for increased crop yields. [15]
- [25]

QUESTION 4

Discuss the soil requirement and management of soils for sugarcane production. [25]

QUESTION 5

- a) Outline the distribution of acid-sulphate soils. [10]
- b) Discuss the reclamation measures you would recommend to increase crop yields in such soils. [15]
- [25]